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react with each other in the presence of water but not in the substantial absence of water to produce chlorine dioxide, said membrane being made of a material which permits: (a) liquid water and/or water vapor to pass therethrough into the [enclosed space] second zone to allow the mixture of at least one metal chlorite and at least one acid forming component to react to product chlorine dioxide and (b) the so produced chlorine dioxide to pass therethrough out into the liquid water in the first zone to produce the [product] aqueous solution [containing] of chlorine dioxide.

Please add the following new claims:

29 41. The device of claim 26 wherein the metal chlorite is selected from the group consisting of alkali metal chlorites and alkaline earth metal chlorites.

30 42. The device of claim 26 wherein the metal chlorite is sodium chlorite.

31 43. The device of claim ³⁰42 wherein the acid forming component is a dry water soluble solid which produces an acidic solution when dissolved in water.

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32 44. The device of claim ³¹43 wherein the acid forming component is selected from the group consisting of acids and acidic salts.

33 45. The device of claim ³²44 wherein the acid is selected from organic acids.

34 46. The device of claim ³³45 wherein the organic acids are selected from the group consisting of citric acid, tartaric acid, and oxalic acid.

35 47. The device of claim ³⁴46 wherein the organic acid is citric acid.

36 48. The device of claim ³²44 wherein the acidic salts are selected from the group consisting of alkali metal acid salts and alkaline earth metal acidic salts.

3746. The device of claim ³²44 wherein the acidic salts are selected from the group consisting of magnesium nitrate, lithium chloride, magnesium sulfate, aluminum sulfate, sodium acid sulfate and potassium acid sulfate.

3850. The device of claim 26 wherein the synthetic molecular sieves are selected from the group consisting of synthetic zeolite Y, dealuminated Y, mordenite and ZSM-5.

3951. The device of claim 26 wherein the acid forming component produces a pH of below about 5 when mixed with water.

4052. The device of claim 26 wherein the aqueous solution of chlorine dioxide has a pH of between from about 2 to about 10.

4153. The device of claim 26 wherein the membrane is water softenable.

4254. The device of claim 26 wherein the membrane is at least partially water soluble.

4355. The device of claim ⁴²54 wherein the membrane dissolves in water after a period of time at least equal in length to the time it takes the metal chlorite and the acid forming component to substantially react to produce chlorine dioxide.

4456. The device of claim 26 wherein the membrane is made of a material selected from the group consisting of gelatin, polyvinyl alcohol, cellulose and derivatives thereof.

4557. The device of claim ⁴⁴56 wherein the derivative of cellulose is hydroxypropyl methyl cellulose.

4658. The device of claim 28 wherein the membrane material is made from a microporous nonwoven hydrophobic polymer.

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~~47-59~~ The device of claim ⁴⁶58 wherein the microporous nonwoven hydrophobic polymer is selected from polyethylene and polytetrafluoroethylene.

~~48-60~~ The device of claim 26 wherein the membrane contains openings of sufficient size to enable the controlled passage of water into contact with the metal chlorite and the acid forming component.

~~49-61~~ The device of claim 26 wherein the mixture is present in the second zone in the form of tablets.

~~50-62~~ The device of claim 26 wherein the mixture is present in the second zone in the form of powders.

~~51-63~~ The device of claim 26 wherein the mixture is present in the second zone in the form of granules.

~~52-64~~ The device of claim 26 wherein the mixture is present in the second zone in the form of pellets.

~~53-65~~ The device of claim 26 wherein the mixture is present in the second zone in the form of agglomerates.

~~54-66~~ The device of claim ⁵³65 wherein the agglomerates in the second zone are present as two types:

- (a) a first type comprising at least one metal chlorite or a mixture of one or more metal chlorites and one or more non-acid forming additives; and
- (b) a second type comprising at least one acid forming component or a mixture of one or more acid forming components and one or more metal chlorite-free additives.